When a surface price taker requests autodealing, the system of the invention checks that the deal is below the size threshold for autodealing and then makes a composite price from the best bid and the best offer from the volatility surfaces that have been provided. The surface price taker will then be shown the price and may deal on it as previously described. The provision of a composite is simple in that the system takes the best bid and the best offer for any option that is requested. However, the system also includes checks to ensure that a submitted surface is not arbitrageable against any other surface that the system already holds. Deal details and deal booking are handled in the same way as for other options described.

WE CLAIM:

1. A system for providing a price quotation on a financial instrument option contract comprising:

(a) a plurality of users;

(b) one or more volatility surfaces, each maintained by a user;

(c) a request for an option contract on a financial instrument, the request provided by a user;

(d) a protocol for polling the at least one or more volatility surfaces to obtain one or more prices corresponding to the requested option contract;

(e) a protocol for determining the highest bid to buy and lowest offer to sell among the prices obtained; and

(f) a communication providing the highest bid to buy and lowest offer to sell to the user requesting the option contract.

2. The system of claim 1, further comprising a system for eliminating an arbitrage between two or more prices, each price comprising a bid and an offer in volatility units, the system for eliminating arbitrage comprising:

(a) a protocol for determining whether the highest bid to buy is higher than the lowest offer to sell; and

(b) a protocol for preventing the user from trading on both the highest bid to buy and the lowest offer to sell if the highest bid to buy is higher than the lowest offer to sell.

3. The system of claim 1, further comprising a system for avoiding arbitrage, the system comprising:

(a) a communication providing a notification that a user's volatility surface has changed;

(b) an indicative option contract having a price held by the system, the price comprising an offer to sell and a bid to buy;

(c) a protocol for polling the user's volatility surface to obtain a price for the indicative option contract;

(d) a protocol for comparing the price of the indicative option contract obtained from the user's volatility surface to the price of the indicative option contract held by the system to determine whether a bid to buy the indicative option contract is higher than an offer to sell the indicative option contract; and

(e) a communication comprising a notification of arbitrage if a bid to buy the indicative option contract is higher than an offer to sell the indicative option contract.

4. The system of claim 3, wherein the indicative option contract has a tenor of one month to twelve months.

5. The system of any of claims 1-4, wherein the option contact is a currency option contract.

6. A method for providing a price quotation on a financial instrument option contract, the method comprising:

(a) receiving a request for an option contract on a financial instrument, the request provided by one of a plurality of users;

(b) polling one or more volatility surfaces, each maintained by a user, to obtain one or more prices corresponding to the requested option contract;

(c) determining the highest bid to buy and lowest offer to sell among the prices obtained; and

(d) communicating the highest bid to buy and lowest offer to sell to the user requesting the option contract.

7. The method of claim 6, further comprising steps for eliminating an arbitrage between two or more prices obtained, wherein each price comprises a bid and an offer in volatility units, the steps comprising:

(a) determining whether the highest bid to buy is higher than the lowest offer to sell; and

(b) preventing the user from trading on both the highest bid to buy and the lowest offer to sell if the highest bid to buy is higher than the lowest offer to sell.

8. The method of claim 6, further comprising steps for avoiding arbitrage, the steps comprising:

(a) receiving a notification that a user's internal volatility surface has changed;

(b) polling the user's internal volatility surface to obtain a price of an indicative option contract, the price comprising an offer to sell and a bid to buy, the indicative option contract having a price held by a system server;

(c) comparing the price of the indicative option contract obtained from the user's volatility surface to the price of the indicative option contract held by the system server to determine whether a bid to buy the indicative option contract is higher than an offer to sell the indicative option contract; and

(d) communicating a notification of arbitrage if a bid to buy the indicative option contract is higher than an offer to sell the indicative option contract.

9. The method of claim 8, wherein the indicative option contract has a tenor of one month to twelve months.

10. The method of any of claims 6-9, wherein the option contract is a currency option contract.

11. A volatility surface for obtaining a price on a currency option contract for a currency pair, the volatility surface comprising one or more contributions to the volatility surface, the contributions provided by a plurality of users, the contributions comprising:

(a) a volatility price corresponding to an option contract for each of a series of deltas and expiring every business day in the year following the date of the contribution; and

(b) a bid/offer spread.

12. A method for updating the volatility surface of claim 11, wherein the currency pair has a currently traded volatility run, comprising the steps of:

(a) adjusting 50%-delta volatilities on the volatility surface to equal 50%-delta volatilities of the currently traded volatility run; and

(b) adjusting volatilities for options whose deltas are not 50% to maintain the same relationship with the 50%-delta volatilities existing on the volatility surface prior to the adjustment.

13. The volatility surface of claim 11, in which the series of deltas are from 5% to 95%.

14. The volatility surface of claim 11, in which the bid/offer spread is provided in terms of units of volatility.

15. A computerized system for trading currency options, the system comprising:

(a) a system server;

(b) a plurality of users, each user assigned to one of a plurality of tiers, the tiers including:

(i) a first tier of users, the system server operating a protocol to permit the first tier users to enter runs of offers to sell currency options and bids to buy currency options, enter offers to sell specific interest currency options and bids to buy specific interest currency options, deal on offers to sell currency options or bids to buy currency options, and improve on offers to sell currency options or bids to buy currency options; and

(ii) a second tier of users, the system server operating a protocol to permit the second tier users to enter runs of offers to sell currency options and bids to buy currency options, deal on offers to sell currency options or bids to buy currency options, and improve on offers to sell currency options or bids to buy currency options, the system server operating a protocol to preclude the second tier

users from entering offers to sell specific interest currency options and bids to buy specific interest currency options;

(c) workstations for receiving offer and bid information on currency options from users, and for displaying offer and bid information on currency options to users; and

(d) a communication link that receives and transmits communications between the users of the system and the system server, including communications to users that are parties to a completed currency option contract providing information concerning the completed contract.

16. The computerized system of claim 15, wherein the currency options are for a currency pair, each of the currency pair selected from the group consisting of the following currencies: the Euro, the United States dollar, the Japanese yen, the British pound, the Swiss franc, the Australian dollar, the New Zealand dollar, the Canadian dollar, the Swedish krona, the Norwegian krone and the Greek drachma.

17. The computerized system of claim 15, wherein a user may specify a spot-out corresponding to an offer or a bid entered by the user.

18. The computerized system of claim 15, wherein a user may specify a time-out corresponding to an offer or a bid entered by the user.

19. The computerized system of claim 15, wherein the runs entered by the first tier users and the second tier users are volatility runs.

20. The computerized system of claim 15, wherein the option contracts are entered and displayed in units of volatility.

21. The computerized system of claim 19, wherein the first tier users and the second tier users are required to periodically submit volatility runs.

22. A computerized system for trading currency options, the system comprising:

(a) a system server;

(b) a plurality of users, each user assigned to one of a plurality of tiers, the tiers including:

(i) a first tier of users, the system server operating a protocol to permit the first tier users to enter runs of offers to sell and bids to buy options, enter offers to sell specific interest currency options and bids to buy specific interest currency options, deal on offers to sell currency options or bids to buy currency options and improve on outstanding offers to sell currency options or bids to buy currency options;

(ii) a second tier of users, the system server operating a protocol to permit the second tier users to enter runs of offers to sell currency options and bids to buy currency options, deal on offers to sell currency options or bids to buy currency options and improve on offers to sell currency options or bids to buy currency options, the system server operating a protocol to preclude second tier users from entering offers to sell specific interest currency options and bids to buy specific interest currency options; and

(iii) a third tier of users, the system server operating a protocol to permit the third tier users to deal on offers to sell or bids to buy options, the system server operating a protocol to preclude third tier users from entering runs of offers to sell currency options and bids to buy currency options, entering offers to sell specific interest currency options and bids to buy specific interest currency options and improving on offers to sell or bids to buy options; and

(c) workstations for receiving offer and bid information on currency options from users and for displaying offer and bids information on currency options to users; and

(d) a communication link that receives and transmits communications between the users of the system and the system server, including communications to users that are parties to a completed system transaction providing information concerning the completed transaction.

23. The computerized system of claim 22, wherein the system server operates a protocol permitting a user to provide credit criteria via the communication link specifying counterparties with which the user will deal, the protocol operating such that the user may access only offers to sell and bids to buy from the counterparties that meet the credit criteria.

24. The computerized system of claim 23, wherein the credit criteria provided comprises a maximum deal amount.

25. The computerized system of claim 22, wherein the runs entered by the first tier users and the second tier users are volatility runs.

26. The computerized system of claim 22, wherein the options traded on the system have a tenor one week to one year.

27. The computerized system of claim 22, wherein the options traded have a tenor selected from a group of tenors consisting of: one week, one month, two months, three months, six months, nine months and one year.

28. The computerized system of claim 22, wherein the currency options are for a currency pair, each of the currency pair is selected from the group consisting of the following currencies: the Euro, the United States dollar, the Japanese yen, the British pound, the Swiss

franc, the Australian dollar, the New Zealand dollar, the Canadian dollar, the Swedish krona, the Norwegian krone and the Greek drachma.

29. The computerized system of claim 22, wherein the option contracts are entered and displayed in units of volatility.

30. The computerized system of claim 29, wherein the first tier users the second tier users can access a display of a volatility run.

31. The computerized system of claim 30, wherein the display of the volatility run comprises a current market rate for each of the options in the volatility run until a volatility run is entered by a user.

32. The computerized system of claim 31, wherein the first tier users are required to periodically submit volatility runs.

33. The computerized system of claim 29, wherein the information transmitted to the parties of the completed system currency option contract includes a conversion of the cost of the contract from units of volatility into a monetary price.

34. The system of claim 22, further comprising a system for automatically withdrawing a quote for a price of a financial instrument option contract, the system for automatically withdrawing a quote comprising:

(a) a quote for an offer to sell or a bid to buy an option contract provided by a user;

(b) a period of time provided by the user corresponding to the quote; and

(c) a protocol for withdrawing the quote upon expiration of the corresponding period of time.

35. The system of claim 34, wherein the option contract is a currency option contract.

36. The system of claim 22, the system for automatically withdrawing a quote further comprising:

(a) a quote for an offer to sell or a bid to buy an option contract provided by a user, the option contract for a currency pair having a current market price;

(b) a defined value for the currency pair provided by the user;

(c) a current market price for the currency pair;

(d) a protocol for comparing the user's defined value for the currency pair to the current market price for the currency pair; and

(e) a protocol for withdrawing the user's quote if the user's defined value for the currency pair equals the current market price for the currency pair.

37. A method for trading of option contracts on a computer system comprising:

(a) providing to a plurality of users offers to sell and bids to buy options;

(b) receiving from first tier users (i) runs of offers to sell and bids to buy options and (ii) commands to deal on offers to sell or bids to buy options and (iii) improvements to offers to sell or bids to buy options;

(c) receiving from second tier users (i) commands to deal on offers to sell or bids to buy options and (ii) improvements to offers to sell or bids to buy options;

(d) receiving from third tier users commands to deal on offers to sell or bids to buy options; and

(e) transmitting information concerning a completed transaction to all users party to the transaction.

38. The method of claim 37, wherein the method further comprises receiving credit criteria from the users whereby each user specifies the other users with which the user will deal; and transmitting offers to sell and bids to buy option to buy option contracts provided by the other users that meet the criteria specified by the user.

39. The method of claim 37, wherein the information transmitted concerning a completed transaction includes names of the parties to the completed transaction, tenor, volume of currency, price and date and time that the transaction was completed.

40. The method of claim 39, wherein the price is provided in units of volatility.

41. The method of claim 39, wherein the information concerning a completed transaction includes a price in volatility units and monetary units.

42. The method of claim 37, wherein the runs received from the first tier users are volatility runs.

43. The method of claim 42, wherein the volatility runs are received periodically from each of the first tier users.

44. A method for managing the trading of option contracts of claim 37, further comprising steps for automatically withdrawing a quote for a price of an option contract, the steps comprising:

(a) receiving a user's quote for an offer to sell or a bid to buy an option contract;

(b) receiving a period of time defined by the user corresponding the quote; and

(c) withdrawing the quote upon expiration of the corresponding period of time.

45. The method of claim 44, wherein the option contract is a currency option contract.

46. The method of claim 45, further comprising the steps of:

(a) receiving a user's quote for an offer to sell or a bid to buy an option contract, the option contract for a currency pair having a current market price;

(b) receiving a defined value for the currency pair provided by the user;

(c) comparing the user's defined value for the currency pair to the current market price for the currency pair; and

(d) withdrawing the user's quote if the user's defined value for the currency pair equals the current market price for the currency pair.

47. A method updating the prices for an option contract on a financial instrument, the option contract available for trade on an electronic trading system, the method comprising:

(a) compiling a list of prices, each provided by one of a plurality of users, the prices comprising offers to sell and bids to buy an option contract for a financial instrument;

(b) polling one or more volatility surfaces corresponding to the option contract, the internal volatility surfaces each maintained by the one or more users;

(c) adjusting the listing of the price for the option contract provided by each user, such that the adjusted price equals the price obtained from the user's volatility surface; and

(d) communicating a notice of the adjustment to the user.

48. A method for trading options contracts on currency options on a system restricted to eligible users comprising:

(a) determining a user's eligibility to trade on the system according to criteria, the criteria including creditworthiness;

(b) restricting the activities of the user on the system based on the user's eligibility;

(c) receiving one or more offers to sell and bids to buy for currency option contracts from the user; and

(d) requiring that acceptance of an offer to sell or a bid to buy by the user creates a binding contract.

49. A method for electronic trading of currency options contracts among plurality of users comprising:

(a) providing a user a list of counterparties;

(b) receiving from the user conditions that each counterparty must meet to deal with the user, the conditions including whether the counterparty accept a contract with the user, the maximum tenor the user will accept on contracts with the counterparty and the size of the option the user will accept with the counterparty; and

(c) displaying to the user the prices on option contracts from counterparties that meet that user's conditions for dealing.

50. A method of entering a volatility run into network-based electronic trading system, the method comprising:

(a) accessing a network server of the electronic trading system using a web browser;

(b) receiving a display of a current market rate for each option contract in the series of tenors;

(c) submitting desired prices for each option contract in the series of tenors to the electronic trading system; and

(d) receiving a display of the volatility run submitted to the electronic trading system.

51. The method of claim 50, wherein the market rate for each bid is the current highest bid to buy the option contract at that tenor in the system and the market rate for each offer is the current lowest offer to sell the option contract at that tenor in the system.

52. The method of claim 50, wherein the electronic trading system is for trading currency option contracts.

53. A method for trading options on financial instruments with one or more anonymous counterparties over a computer network comprising:

(a) submitting a price for an option contract to the network server;

(b) submitting criteria for selecting counterparties corresponding to the price to the network server;

(c) submitting a request to the network server that the price is made available to counterparties meeting the criteria;

(d) receiving one or more responses to the price from the network server, each response from a counterparty meeting the criteria; and

(e) dealing on the option contract with one or more responding counterparties.

54. The method of claim 53, wherein the criteria includes whether a counterparty is most active among all counterparties in a stated period of time for a class of traded instrument.

55. The method of claim 54, wherein the class of traded instrument is a currency option contract for a particular currency pair.

56. A method for receiving a price quotation on a financial instrument option contract over a computer network having a network server comprising:

(a) providing a request for an option contract on a financial instrument to the network server;

(b) providing a second request for a communication of a lowest price on the option contract to the network server, wherein the lowest price is determined upon a comparison of one or more prices corresponding to the option contract, the one or more prices obtained by polling one or more volatility surfaces each maintained by a user; and

(c) receiving the lowest price on the option contract from the network server.